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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,629	08/26/1999	MAZDA SALMANIAN	71493-582	6818
7590	11/15/2004		EXAMINER	
SMART & BIGGAR P O BOX 2999 STATION D 900-55 METCALFE STREET OTTAWA, K1P5YP CANADA			LEVITAN, DMITRY	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/383,629	SALMANIAN, MAZDA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dmitry Levitan	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 and 18-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1,10,14-16,18 and 19 is/are rejected.  
 7) Claim(s) 2-9,11-13 and 20 is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \*    c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

Amendment, filed 09/04/2004, has been entered. Claims 1-16 and 18-20 remain pending.

***Claim Rejections - 35 USC § 103***

1. Claims 1, 10, 14-16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Key (US 5,991,272) in view of Beming (US 5,740,537).

Regarding claims 1, 14-16, 18 and 19, Key teaches all claim limitation of a method and computer code (1:7-10) of performing call admission control (call acceptance control 1:15-23) upon a receipt of a request (call arrival block 8 on Fig. 6) for a new session comprising: Making an estimate of a new system QoS which will result should new session be admitted (determining a quality of service for the node should the call be accepted 3:27-30); and Deciding to admit or deny the new session on the basis of the new system QoS estimate (comparing the determined QoS with required QoS to accept or reject the call 3:31-35).

Regarding claim 10, Key teaches comparing the new QoS estimate (determined QoS 3:30-31) to a target QoS (required QoS 3:30-34) and admitting or denying the session based on the comparison.

In addition, regarding claim 18, Key teaches an input device (inherently part of Key node, because the node interfaces communication network 1 as shown on Fig.3) and a processing element (computer 5 as shown on Fig. 3 and 4:28-34).

Key teaches using cell loss probability as QoS parameter (1:33-38), however Key does not teach using frame error rates (FER) as a QoS determiner .

Beming teaches using frame error rates (FER) as a QoS determiner (col. 6 lines 45-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using frame error rates (FER) as a QoS determiner of Beming to the system of Key to improve the system performance in interference environment.

In addition, regarding claim 14, Key does not teach implementing the admission control in a block of a MAC layer.

Official Notice is taken that implementation of admission control in MAC layers is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the admission control system to the system of Key in MAC layers to make the system compatible with other MAC using equipment.

In addition, regarding claims 14-16, Key does not disclose the admission control is implemented in a base station of a radio network.

Beming teaches implementation of call admission control in a base station (control device 22 on Fig. 1 and col. 5 lines 45-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a base station to the system of Key and use it to implement the admission control as suggested by Beming, to allow for the extension of Key's system to a wireless network given that wireless networks provide several advantages such as: no need for medium infrastructure, flexibility, etc.

***Allowable Subject Matter***

2. Claims 2-9, 11-13 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1, 10, 14-16, 18 and 19, have been considered but are not persuasive.

On page 2 of the Response, Applicant argues that Key system is an ATM system, so frame error is not applicable for ATM cells.

Examiner respectfully disagrees.

Key teaches a communication system for controlling packet network (1:7-10), particularly ATM network. Examiner relied on the portion of Key teachings of Call Admission Control (CAC) method applicable to all packet networks.

On page 3 of the Response, Applicant argues that Key and Beming references are incompatible with each other.

Examiner respectfully disagrees.

Key teaches a CAC method for a packet network admitting new call, if the new QoS of the system is favorably comparing with the required QoS. There are many ways to specify calls QoS, one of them is bandwidth and FER is the other.

Beming teaches a CAC method (admitting additional user 3:3-12) in a packet network where FER is used as a QoS determiner (frame error rate 6:45-60).

Examiner believes that a CAC system of Key can utilize the QoS determiner of Beming (FER) to accept or deny new calls, based on the system FER requirement.

In addition, Jain (Error Characteristics of FDDI, IEEE transactions on communications, vol. 38, no 8, August 1990) teaches using FER to characterize performance of a fiber system (see abstract and chapter VIII Frame Error Rate) in an optical LAN.

On page 4 of the Response, Applicant argues that there is no motivation to combine Key and Beming references.

Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, different systems can be characterized with appropriate QoS requirement to meet the particular system quality need. In some systems, bandwidth is the system's best quality determiner and in other systems FER is the best.

Examiner therefore believes that the cited references meet all the claims limitations and the rejection is proper.

***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*PL*

Dmitry Levitan  
Patent Examiner.  
11/08/04.

*JPezzlo*  
JOHN PEZZLO  
PRIMARY EXAMINER